The Australian National University

**Faculty of Arts**

**School of Art**

**Bachelor of Arts (Visual) Honours**

Gaida V Macs

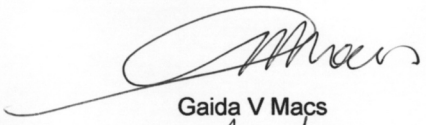
Studio Report

# Habitats

PRESENTED IN FULFILLMENT OF THE REQUIREMENTS OF THE
Bachelor of Arts (Visual) Honours
2004

' I, Gaida Valda Macs, hereby declare that the material presented here is the outcome of the Honours project I have undertaken during my candidacy, that I am the sole author unless otherwise indicated and that I have fully documented the source of ideas, quotations or paraphrases attributable to other authors.'

Signed



Gaida V Macs

25/10/04

Dated

**Abstract**

**Habitats**

My sculptural explorations this year have resulted in a series of three-dimensional shapes that are in dialogue with each other and all are somehow part of an extended family - perhaps some strange new genus. They also bear a familial relationship with the various drawings, both those on the walls and those on the floor. I have worked with bronze, wool, string, steel, wood and wire to create habitats echo childhoods' various cubby houses. My themes this year were lack and abundance, fertility and creation.

Natural and organic in form my sculptures try to communicate my concerns about the environment and the state of the human condition. I use materials I have collected over many years, things which speak of my domestic space, my life and my obsessions.. As I constructed and assembled and cast and wrapped, I began to realise that I was recreating the joy of making smallish habitats; a habit lost in a long-ago childhood.

Semi-autobiographical then, my pods, nests, traps and seeds are receptacles or containers of rich and fertile memories and experiences. Covering, exposing, tying, binding and sewing -each piece speaks of hours of obsessive making and reflecting.

I want to invite viewers to see something familiar in the work- perhaps their own childhood spaces are echoed?

**Acknowledgements:**

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**List of Illustrations**



**List of Catalogue Works**

To be added

## INTRODUCTION

### Background

In this paper I want to tell you three stories – they are all true.

#### *Habitats*

I was influenced by being an only child and a real tomboy. I loved the bush and always made cubby houses. Some were shared spaces like my teepee, but most were private such as the crawl-space under the house, the burnt-out gum tree hollow, the 'blackboy' copse with its ready-made flooring of broken leaves, the off-limits spaces and rooms, the locked, the boarded-up. I made nests, burrows, traps, dams, closets and shrines - most of these personal cubbies were chosen for being just my size - I was fond of observing from my hideouts.

Disappearing after breakfast (usually with a book and something to eat) I enjoyed muddy, dusty, barefoot activities until my mother shouted for me around dinner time. Like most of the neighborhood kids, I was a constant visitor to the local tip – scouring for interesting objects and building materials.

One of my favourite places was the creek at the bottom of the hill – it was full of gilgies and squishy greyblack shiny mud: we made forts and held wars with other kids – our fortifications were fashioned from wood, wire, corrugated iron and daub-covered branches for camouflage – it was a great childhood.

That's the first story.

*" The instinct with the help of which, like the swallow, we construct the world – an enormous nest, an agglomerate of earth and sky, of death and life, and of two sorts of time, one we can dispose of and one that is lacking"*

*Boris Pasternak p.104 The Poetics of Space G. Bachelard*

**Franz Kafka – *everyone carries a room around with them***

## CHAPTER ONE

### Introduction

This report is an account of my work this year. It is linked by three stories which I tell – these are like the points of a triangle – an indication of the shape of the thing. The three stories also relate to my three major series of works.

This year I have created a body of sculpture which reflects the nature of my experience; extending myself into my environment. My initial work proposal indicated that I intended to explore how the process of making art might inform the investigation of "self".

Through making a series of receptacles and containers I am continually referencing my own body and its rhythms, I listen to internal and external conversations and I paraphrase some of these in my making. In exploring my own need to make things I am, at the same time, asking questions about how we are constituted. Are we 'made' from simple genetic patterns handed down over the ages? Or are we constituted in the world today as an agglomeration of what surrounds us – by an accumulation of commodities? What does this say about me? My upbringing, my collecting and my making are all aspects of this investigation.

The dialogue I establish when making art is one that is self-generating and inherently rewarding. The processes I use and the relationship I develop with the works means that I am, in a sense, encoded into the work. While the forms themselves are ultimately separate from me – they contain a part of my history. They evidence the ongoing conversation I have had with materials and ideas.

Carl Jung says " The hands will often find the answer to problems with which the mind has long wrestled"[1]. This has certainly been my experience this year.

I have produced a number of bronze and mixed media sculptures made from a range of materials which I source from my various collections. In addition, I have produced a series of drawings on canvas that try to depict specific aspects of detail of the sculptures themselves , although on a much-magnified scale. My sculpture invites the viewer to relate in a bodily way to objects which may variously range from being insubstantial to very solid.

Just as my work displays evidence of incremental accretion and the ritual of repetitive motion, this report details the various insights and struggles I have experienced this year. One of the most important epiphanies I have had was finding a suitable philosophical 'hook' upon which to hang my practice. *Art Beyond Representation: The Performative Power of the Image*[2] by Barbara Bolt from Melbourne University, was launched at the ACUADS annual conference held in Canberra in September. I started reading and realised that here was a way forward – I was able to locate several themes about being and making which seemed to resonate with my own thinking and feeling.

*Rilke – For the sake of a single poem – "for memories themselves are not important. Only when they have changed into our very blood, into glance and gesture, and are nameless, no longer to be distinguished from ourselves..."*[1]

**First Semester Work**

Hanging in my workshop all summer was the burnt and deformed steel clothing basket insert which my friend, Maureen and I had rescued from her house after it had burnt down in the Canberra bushfires ; it had a teasing linear quality which inscribed a vague cornucopia shape(Fig.1).

[1] The Concise Dictionary of Quotations
[2] Bolt., Art Beyond Representation: the performative power of the image (IB Tauris, London, 2004)

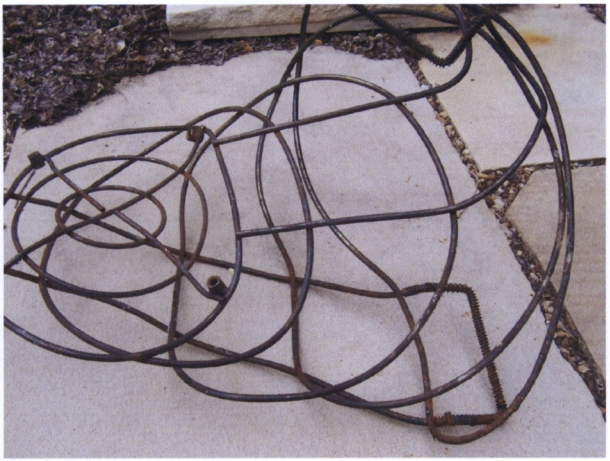

Fig.1 washing basket

This shape took over - I kept drawing this thing in my diaries, in various shapes and forms, material finishes, structured or floppy, over and over again. However, I wasn't thinking abundance and fertility, which are traditional meanings ascribed to the cornucopia, rather, I was thinking about lack, drought and the human condition(Fig.2-4).

Fig. 2

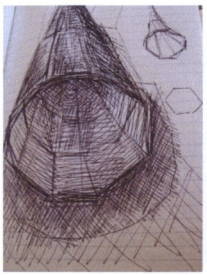

Fig. 3

Fig. 4

*there are many things that always refuse to be contained ~ like emotions and urges and sexual desire and greediness and satiation and physical marks and cuts and bruises and stains of past encounters – seeping into the present experience – never contained never edited*

*we are constructed by what surrounds us – what we live in, what we read, what we eat, what we wear, how we speak, how we relate, how we show off, how we feel when we are up or down, and how often we are the ONLY witness… … we all have messy lives, embarrassing habits and sticky morals…(undated diary entry)*

I began focussing on the cornucopia as an abject object: drawing and making smallish maquettes – they were dry and wiry, lean and bony, airy and insubstantial.

***exposed*** (my first piece)

One of the first maquettes I made was constructed from some old bamboo garden stakes that I found in the shed. I started to saw the stakes into smaller modular pieces and then split them lengthwise using a hammer and stanley knife. Using some tie wire I had on hand I began to bind the bamboo pieces top and bottom and then attach them in to increasingly larger circles of the wire in a rough conical shape. I wanted to somehow inscribe the volume of a cornucopia shape in space with very little bulk.

It satisfies me that this maquette had a certain quality of spikiness and threat. In fact, working with the cut tie wire made my fingers bleed – my DNA has thus inadvertantly been made part of this piece. Feedback was positive about this work and I went on to make several other versions of the original test piece scaling them up considerably. In the end I had used a whole roll of the non-galvanised tie wire and several dozen bamboo stakes making, firstly, dozens of small multiple elements and then assembling the 'trap' or 'cage' shape which is slightly larger than my body.

***Exposed*** developed directly and exactly from the maquette(Fig.5) – apart from making the connections slightly stronger and using more of them, the piece has reached its critical size given the inherent structural support needed by both the bamboo sticks and the wire strength. While this body of work was certainly the least stressful to make, in many ways I think its simplicity and the way it contains a large volume of space is effective.

*OED **husk** n, v.t*
*1. Dry outer covering of some fruits or seeds { fig,) worthless outside part of anything*

*Things that have been uprooted and placed elsewhere – things that show an endless series of processes and procedures, of folding and stacking, and hanging and collecting, of stretching and pressing, of placing and seeing and remembering – the presence of the things.*

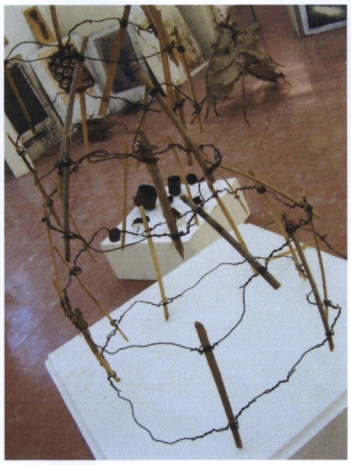

Fig.5

***Perseverance, Displacement and Resolution***

From the same cornucopia maquettes I started developed a parallel line of research which consisted of making a number of split torso-shaped armatures over which I applied many layers of coverings(Fig. 6-7).

The inspiration for these 3 forms grew from thinking about abundance and fertility. I have been thinking about the state of the environment and how we, in the industrialised world are destroying species, habitats and ecosystems which we will never recover. Rather than exhibiting the largesse of the traditional cornucopia these seed pods, or nests have lost their ability to be of use and have been discarded. Whether due to overuse, neglect or simply because they may have reached their use-by date and are now infertile, dried up and abandoned. I thought about placing them like abandoned toys or nests on a bed of scattered straw or soil like one might find in a disused cubby.

At this time I felt at ease with where I was going, and I also realised that some of my other investigations would need to be curtailed. The layering of these forms took some time as I struggled with finding the appropriate materials. Initially I applied a layer of chicken wire and was intending to use papier-mache made from my old drawings.

However, on a visit to Queanbeyan Rural Supplies I discovered a really old bolt of hessian carpet underlay ($15) which was perfect. Having worked with textiles last year I wanted to further explore these possibilities.

Fig. 6

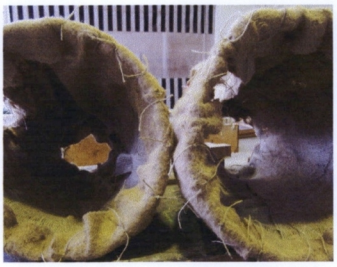

Fig. 7

Cutting up the hessian into rough pieces, I started to attach this to the armature both inside and outside, sewing jute string through the body of the armature. I enjoyed the repetitive process while letting the shape itself determine how it developed. Taking a critical look at the piece I realised that I wanted it fuller, bulging somehow - ripe, fertile maybe? I tried stuffing the first form (***perseverance***) with cushion filler but this was too neat – so in order to fetishise the shape a little more I decided to overdo the string sewing and tying – thinking initially that I would only cover part of the form(Fig. 8).

Fig. 9

*Forms need more tension – twist or turn,, what sort of filling? Netting as a base. Try a small prototype – bind them more – try with long hessian strips tied and sewn on ?*
*Thinking about what its all about – still lack and abundance and art – like I'm currently feeling -, worn out, discarded, chrysalis, cocoon, husk, all related to me and my life… (undated diary entry)*

For the second pod(*displacement*) I wanted the stuffing to have fullness without weight so I cut open an old featherdown pillow and used the feathers and down. Incredibly messy. Wrapping, layering and covering were all processes I have used before in my sculpture but I was also trying to introduce textural contrast through obsessively sewing and tying into the now-softish forms.

The forms emerged over the several months it took to develop them. I generally scheduled at least 2 hours each day to sew and tie the string and rope around the armatures – I found that I needed to allow time for each of my processes so that I didn't lose interest in any one particular piece as a result of having only a single focus . However, neither of the 3 pods were actually completed until much later in the year. Sourcing a constant supply of the selected rope and string proved to be time consuming as I only managed to find a reliable supplier in late May.

It was at about this time that I started to get anxious about not having a piece resolved by the end of the First Semester – something I had promised myself I would do. This anxiety led me to beginning work on ***arrested***.

***Arrested***

Living in Weston, I see the damage done by the Canberra bushfires of 2003 every day. I am saddened by the destruction, by the loss of plants and animals and even the pine forests – at least they were vaguely green. We used Stromlo and its surrounds all the time – now it's awful, depressing and unwelcoming. Wind and erosion and lack of water have turned the landscape to grey dust, dry and forbidding.

I wanted to create something solid which spoke of this environmental tragedy. I was imagining something hand sized and heavy – a shape that could speak of fecundity and it's loss. Fortunately, ever since

attending Iron Corroboree at Braidwood in February, I had been collecting seed pods, husks and pine cones to look at and to draw. My drawings tended to be large and expressive. I was preoccupied with mark making and blurring the boundary between the ground and the object. In these drawings I was focussed on capturing details of the seed pods, really looking closely at their complex structures(Fig.9-10).

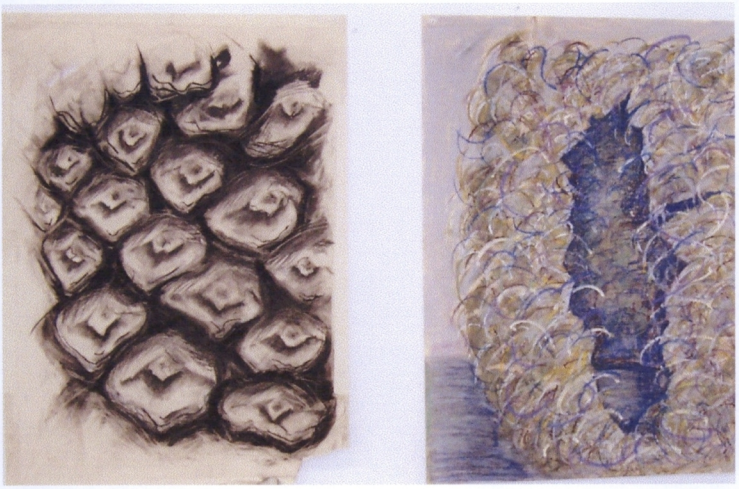

Fig.9

The first series of small bronze pieces made from the pods and pine cones were a welcome respite from the other work I was undertaking. In a number of ways, the investment of these pieces gave me a counterpoint both in terms of my processes and also in terms of balancing my work visually. Just as the fragility of the structure and the containment of a large volume of internal space were important discoveries in ***Exposed*** I found that ***Arrested*** needed a solid and inviolable interior space within a small dense form. This observation led me to working in bronze. The intensity and concentration that the investment process requires is more than rewarded by the result – the solidity and 'permanence' of the final works.

Fig.10

I appreciate that the preciousness of bronze transfigures the common pine cone while lamenting the fact that the process itself effectively destroys any life immanent in them.

The Patate [Pommes de Terre] of Giuseppe Penone[3] were certainly instrumental in thinking through this piece. I recalled seeing them several years ago – and responded positively to the organic/man-made tension of the work as well as to the contrast caused by the dirty pile of potatoes and the smallish bronze pieces almost camouflaged amongst them.

At the end of First Semester I had a number of partially completed works which I was eager to resolve. In June however, I received devastating news about the sudden death of not one, but two friends. Their deaths and their funerals happened separately less than a week apart and had an immense impact on my productivity for quite some time. I found I was unable to concentrate, lacked motivation and not surprisingly, was quite depressed. To cap it off I experienced a recurring bout of sciatica which made working and lifting somewhat problematic. I managed to keep working though by researching a number of theoretical issues which allowed me to take a break from the making and to gain some perspective on my work.

[3] Didier Semin., L'Arte Povera, p48

## CHAPTER TWO

### Theoretical constructs

One day I was leafing through an old New Scientist magazine when I spotted the following reference in a book review:

> "animal stuctures like webs, nests, hives, burrows and mats are physiological extensions of their animal creators. They take energy and materials from the environment, including sunlight, water and oxygen, and funnel them to the organisms inside. This makes these structures as much a part of the living animal as more conventional organs such a liver, kidneys and hearts... suddenly the border between the living and non-living seems very arbitrary"[4]

Fig.11

This sang to me – all of a sudden I realised that I was making forms which could be body habitats. I had intuitively selected shapes and materials which I fashioning using materials which could work as elements in shapes such as nests, traps, and shells. The article illustrated a number of animal and insect constructions(Figure 11) which reflected the environmental requirements of the maker.

[4] Brown, Katherine. "It's Alive![ Book Review of The Extended Organism: The Physiology of Animal-Built Structures by J. Scott Turner (2000)," New Scientist, 28 October 2000: 30-33

J. Scott Turner's views expand the concept of the "extended phenotype"[5], mooted by Richard Dawkins – who postulated that genes play as essential a role in determining "building behaviour" of animals as they do their colour and size. Turner's hypothesis is crucially concerned with whether the built structures themselves, be they webs, burrows or nests, can be said to be "alive".

He asks whether such structures can be considered as 'external organs' of the animal. And while this question of whether or not the forms I make are 'alive' is not one that I have grappled with – I became entranced by the possibilities of thinking like an 'extended organism ' in relation to my building.

Turner himself was confronted with the impressive extended phenotype of the termite when he came face-to-face with huge mounds created by the South African termite. His studies showed that the airways of the mound acted like a pair of lungs performing the respiratory and the excretory systems for the colony. He concluded "that termite mounds are really an extension of the termites themselves, an integral and active part of their physiology"[6].

I considered whether it would be possible for objects to be viewed as external manifestations of my internal psychological state. There is a sense that by relying on the shape and reach of own body, using my own material offcasts, and being directed by my own stories I am somehow breathing life into my objects. Like many insects and animals I guess I am marking my territory – establishing and extending my personal space.

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[5] Dawkins., Richard – The Extended Phenotype
[6] Brown, K., Ibid

Blurring the boundaries between my body and the extended habitats that I'm making is evidenced by the process I use to build my forms; When I sew and tie and apply the husks and coverings I literally am inside the form with one hand guiding the needle, and pushing the thread through. I have to continually rotate and turn the forms to allow me access to the various parts, I feel, rather than see, my next steps; the work leads me to where it should go. Like the burrowing vole or the spider making its web, I am part of the exploration process – it is almost an instinctual reaction.

Part of me wants to invite the viewer to gaze – and maybe enter into some of the spaces, but, like my earlier cubby-houses – I feel a certain reluctance in sharing this secret space.

***Mona Ryder*** *– 'I like the freedom of thought that art allows" – shrouds and sacks, vessels and containers… womb shapes seed pods, husks and shells, traps and burrows and hideouts and all that's hidden therein and somehow intimate and "my" size.*
*In Voigt., Anna, New Visions, New perspectives: Voices of Australian Women Artists*

This is the second story

**Collecting**

*" you know that tingling a sexy promise gives?*
*double it for religion*
*treble it for collecting"*[7]

I collect stuff: I have all the keys from all the houses I've ever lived in. I have all the postcards I ever sent and received. I have over 70 dozen wine bottle corks, evidence of many good times and memories. I choose very carefully but don't always understand the reasons for a choice often until much later – sometimes years and years. I read extensively about collecting, from the tradition of Wunderkammer through to articles on cultural collecting and autobiography.

The reason collecting is important for me it that it normally provides the springboard from which I begin to make a work. I will arrange and rearrange my stuff regularly – placing things differently – together or further apart; or reclassifying an object and transferring it to another category – this year I used collected and found objects to begin my maquette making: the grapevine cuttings, the leftover wool, the bamboo garden stakes and the wire.

My collecting takes place mostly around the domestic environment. Like Linde Ivimey I re-use laundry lint and old pillow cases.[8] I recycle brown paper bags and old mattress protectors in my work. I appropriate empty food containers and use them to construct collages.

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[7] Gash, Jonathon. The Judas Pair – find ref
[8] Gellatly, K., Close to the Bone: Linde Ivimey Heide, Melbourne, 2003

Fig. 12

Fig. 13

Materials find their way into my collections largely through finding things that I like to handle. For instance, I've saved this year's grapevine cuttings because I appreciate the flexibility these give me to construct some interesting and organic frameworks. I've found old wool and steel offcuts which I have cannibalised into my work. I've sourced old hessian underfelt and re-used discarded clothing. I am attracted to old, worn-out, organic things which have a history of use. I select fabrics and threads from my various piles when I am thinking about making something – I spread out the materials and arrange and rearrange them until I start to see patterns emerging(Fig.12-13).

My processes are very much hands-on: I need to personally weld and wire and sew the pieces. The material requires a dialogue of engagement and treatment. I have to handle each process in the making myself – to choose which way the next stitch will take me - I sometimes move in simple spiralling movements, either expanding or contracting. I add tension or not depending on how I'm feeling at the time – as the sculptures evolve they start to look a bit like me – worn, marked and with a patina that comes from aging.

Like the artist Barbara Zusman,[9] I am seduced by the uneven tensions which arise during the wrapping and sewing and tying motions... ". Her technique is derived from the simplest kinds of instinctual patterning; simple circular accretion. This is the technique of termites, paper

[9] Kathleen Whitney in World Scupture News #63 , Spring 2002

wasps, bees, and other builder insects and numerous species of birds."

Textiles and string, rope and other bindings all speak of control. I understand that its finally all about the creative impulse and how its burgeoned in me over the past few years.

These sentiments are well expressed by Maureen Megerian speaking about the sculpture of Maren Hassinger:
"When I make a work, all of me is contained within it. I make things that are extensions of myself that will express a basic humanness and so allow viewers their own point of entry into the work..."[10]

**Philosophical constructs**

As indicated, this year in particular, I have increasingly focussed on the process of making rather than on the end product or the finished work itself. The process involves a conversation between the material, the almost self-selection of combining units and the semi-hypnotic state induced by repetition and connection; together with a willingness to let this multi-faceted dance dictate its own direction.

In trying to describe my evolving modus operandi, I was pleased to come across Barbara Bolt's paper[11] *"Heidegger, handlability and praxical knowledge"*. As Bolt explains, Heidegger argues that " ...we come to know the world theoretically, only after we have come to understand it through handling... through active use, we establish original relations with things."
For me, this reinforces my growing belief that use of the material, the use of the tools, (especially the hands), the use of the treasure chest of

*HUSK – why hessian? Underlay? – cos it's fabric and the texture and feel while I';m working is important – its rough NOT soft and filmy : its dry and scratchy – qualities I want to evoke – the knotting, tying,sewing, weaving (undated diary entry)*

[10] Woman's Art Journal v 17 (Fall 96/Winter 97) p 21-5 , *1996 Entwined with nature: the sculpture of Maren Hassinger*, Maureen Megerian

[11] Bolt, Barbara., *Heidegger, handlability and praxical knowledge*, ACUADS Conference paper, September 2004

forms, colours and textures that fill our heads, constitutes the primary artistic event. In Barbara Bolt's book *Art Beyond: the performative power of the image*[12]she affirms a different type of "knowing" beyond the mental realm, one that may not require a verbal language "...such knowing occurs at the level of hands and eyes and operates on a different register..."[13]. In the book the author struggles to find a way of speaking about the logic of visual art practice without assuming that an art object "represents" something. She postulates that 'art as process' is as valid and necessary in the psyche of the maker as is the final object. In fact, she is critical of the commodification of objects in the current art market.

In thinking this through I wondered whether we make shapes and forms that fulfil certain archetypal needs – like the refuge or the nest, the burrow or the shell. Just like Turner's animal, bird and insect builders we are drawn to make our own extended spaces which contain and possibly reflect ourselves. As I make, I am continually stretching, moving, lifting, bending, peering and reaching in and through. I imprint my body into the work; it starts to become an extension of me and my rhythms.

I have come to rely on the insights that making art has enabled me to have. My need for context and affirmation have been significantly validated by making sculpture. And, as I make, I am free to obsess and worry over many life issues – aging,creativity and other existential concerns. As I tie and sew and twine I give myself over to shapes which emerge from "... the flux of practice, acts and decisions occur(ing) in the heat of the moment and not as the result of rational logic."[14] It is an added bonus when the 'finished' pieces achieve an aesthetic that both I an others appear to enjoy.

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[12] Bolt, Barbara, Art beyond Representation , (IB Tauris, 2004, launched ACUADS conference September)
[13] p187 Bolt
[14] ibid

## CHAPTER THREE

This is the third story

### Tailormade

My mother was a displaced person who came to Australia after fleeing her home during the war; she was an accomplished dressmaker – her wardrobe was full of wonderful clothes, she had an elegance not often seen in town.

Her tailoring skills were first rate and when word of this spread she had a stream of women from all over town at her door with their precious clothing which needed a 'bit of a lift' or a complete makeover. The alterations and changes were always stylish and appropriate – my mother had very strong codes about the right clothes for the right occasion.

Unfortunately I have not inherited my mother's finer tailoring skills – but I have always collected fabrics and threads and cords and string and all year I've had a strong need to use the needle and thread and to sew and to cut and to tie and to knot.

Fig.14

*Annette Messager – her work Histoires des robes series – recalls both body and life of the wearer of the gowns, robes, etc that are presented framed.*
*What constitutes identity? Which 'bit' are we showing at any give? I suppose it defines n moment? Which face are we presenting? In a totally branded consumer environment how do we assert any individuality? – from stuff that's around me me(undated diary entry)*

**Artistic influences**

Eva Hesse is one of my important touchstones, in particular her use of flimsy, insubstantial materials which somehow activate the space they surround or are contained within. What appeals to me is the juxtaposition of order and chaos she manages to imbue into works like *Laocoon*(Fig.15). The expressive energy inherent in the coils and windings of the cord inscribing the space in and around the ladder give the work dynamic tension. The viewer becomes embroiled with the movement of the writhing snake-like forms, chaos entrapped within a formal structured container. Referencing the original Greek sculpture, and playing with its expressionistic turmoil, Hesse has used base materials such as plastic pipe, cotton cloth and papier-mache to speak of the irrational and the rational. The sagging, spooling and seemingly 'alive' cord suggests a certain obsessive and ritualistic playfulness in her methodology, one that is close to my own methods.

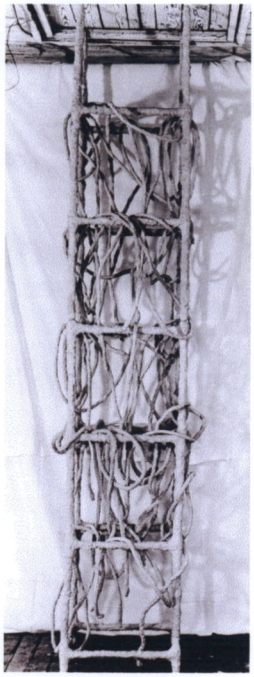

Fig. 15

Magdalena Abakanowicz is another artist whose work resonates strongly with me. Particularly her soft sculptures, with their invisible interiors and split exteriors show the mark of the artist's hand.

*Embryology* – a work of some 900 individual modules speaks of cocoons, mummies, of seeds and of life cycles. Michael Brenson[15] writes abvout her "astonishing...organic vitality". He speculates "... the hundreds of soft rounded shapes – a small as a potato or baby bird, as large as a man or woman in a sack – seem like flesh, tissue, and cells that are continuing to shape themselves even as we wander around them".

The sort of seemingly casual placement of the forms within this installation affords a sense of discarded children's playthings – abandoned, fallen into disuse, yet somehow not forgotten. The excessive number of elements in this work bespeaks volumes about the tenacity of life and obsessive creativity. Choices she has made to use old hessian, burlap, cottons and the like reference the domestic and the feminine. The space around and placement of the forms seem to suggest that these forms are not really discarded – rather dormant – retaining the creative impulses internally. To me they are full of potential energy, I see in the split exposed innards some sort of psychological energy bursting forth(Fig.16).

Her playfulness with scale and volume allows energy to flow between the individual pieces and the choice of a monochromatic palette suggests these forms are all part of an extended family or genus of some strange creature. Her sewing and handling of these forms is akin to my own processes.

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[15] Brenson, Michael., *Abakanowicz Recent Sculpture*, RI School of Design, Providence, 1994, p. 12.

Fig.16

**Second Semester work**

As I was resolving ***displacement*** I re-engaged with Gaston Bachelard. His[16] discussion about the nest as metaphor for sanctuary and refuge rang true and in particular confirmed the rationale for my building activities. My need to make things can be traced back to childhood's cubbies – the desire to make private spaces which conformed to my own size and shape.

This desire led to my thinking about children's playgrounds. The idea of a recently-abandoned playground started to appeal to me as a setting for me to display my work. I wanted to engage with that sense of naïve wonder we feel when we find ourselves in an environment which contains discards of another living being. For me, as a child, I remember this intrigue was sparked by finding bones and strange pods. For Bachelard, the nest is symbolic of an empty nest or an abandoned nest or an old home – nostalgic somehow.
This nostalgia resonates with me as my style of making is grounded in the repetitive and ritualistic. I have an instinctive urge to make. This urge to build and make could be argued is similar to the drive an animal or a bird evidences in their building; in fact, Michelet, an ornithologist to whom Bachelard refers,

[16] Bachelard., Gaston., The Poetics of Space Beacon Press, Boston, 1994 p.101

"suggests a house built by and for the body, taking form from the inside, like a shell, in an intimacy that works physically.[17]"

As I got closer to resolving this work I realised that it was important for me that the end product had a sense of muscular striation, of tension not just texture, of some bodily manifestation of a sort. I began to exaggerate negative and positive spaces and to enjoy the play of volumes. Not surprisingly, parts of the sculpture took on a decidedly bodily feel, with orifices and extrusions suggesting internal or external volumes(Fig. 17-19).

Fig.17

Fig.18

I see these works somehow as offspring of mine – while they now embody their own space and time and a place separate from me, they are nonetheless made in direct relationship to my arm span and my reach, my hand size and my strength and skills.

[17] Bachelard ., Ibid p 101

Anthropomorphic certainly, but also suggesting the absence of a body that was present and that was intimate with and within this space, the three pod sculptures have become habitats which contain the specific qualities I needed to exhibit in order to complete each one.

Fig.19

**Drawings**

In addition to my sculpture, I draw most days; sometimes my drawings are small sketches in my journal, sometimes much larger experiments which may or may not get resolved. Early in First Semester I started to focus on building volume with repetitive mark making. This has continued with some efforts being rather more successful than others. One of these experiments started with taking close-up digital photographs of my sculpture. These were then manipulated with photoshop to arrive at an image in black and white of a particular detail of the work(Fig. 20). This image was then transferred onto a primed canvas. I quite liked the contrast of producing a large drawing of what is effectively quite a fine detail and the visual graphic quality that I found I could achieve(Fig.21).

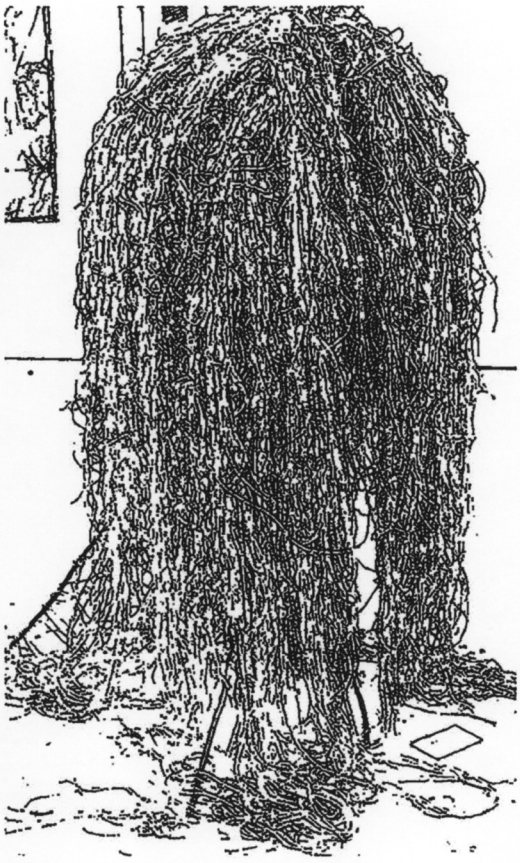

Fig. 20

Fig. 21

*Mikala Dwyer*
***Hollowares and a few solids***
*Barberism & AC for C Art 1995*
*"work is composed of many parts that do not add up to a whole. Instead there are peculiar and shifting relations between things as a family. Simple objects and materials are grouped together to form little inter-connected groups that each seem open ended and provisional. Others stand alone, self enclosed systems simultaneously organic and hand made … they exist in order to be rearranged and reformed or perhaps just to collect in corners "*
*p3 catalogue*
*" as a viewer we are drawn into a space of fantasy, invited to assume the low tactile proximate view of the child"*

## CONCLUSION

In my studio workshop proposal for this year I outlined the following aim " to explore how the making process might inform the investigation of 'self'. "[18]

As soon as I'd written the proposal however, it was gone from my consciousness. In my usual frenetic and scattergun way I then went about making stuff and enjoying every moment of fulltime university art school life.

[18] Approved study program – work proposal.

However, when the time came to reflect about the year I was pleased to find that I had actually achieved my goal. Through a delightfully serendipitous combination of time and process I have managed to produce body of work which embodies my year and its lessons.

This year has been nonetheless, a challenge. Many early experiments did not progress – the usual sacrificial pieces. By building in flexibility and working in parallel processes I was able to maintain my energy. By continuously writing, drawing, reading and making I was able to discover a whole explanatory context which enabled me to forge ahead. I have come to appreciate and welcome the down times when production is at a standstill, for these spaces provide necessary respite and recovery time.

I know I can rely on the various systems I have in place which enable me to capture ideas so these are not lost to the ether. Further, I am increasingly coming to understand my own rhythms and have developed an appreciation and trust in the process-driven nature of my sculpture.

The work I have made this year is an extension of my body in all senses I am "in" the work, both physically, psychologically and metaphorically. My exploration of interior space and volume has been intuitive but by considering sculptural values and formal principles, I was able to create a body of work which references past artistic practices and demonstrates a wide variety of studio practice. My choices of scale, process and material were made quite deliberately and, while there were many sacrificial pieces and test pieces along the way, these all helped to inform me(Fig. 22).

**Where to from here**

I want to explore the possibility of making spaces which might possibly allow one entry – if one is an organism of the right size and shape. I was very moved by the recent Montien Boonma exhibition at the NGA where one can enter the works (like Sala for the Mind) – this suggests that the space becomes one's own – private and inaccessible to others for a time. Thus, the idea of making a tailormade space big enough for me or others to fit into is appealing. I can see myself constructing some sort of upholstered or fabric-lined form that one can enter and hide in.
I am very much looking forward to a holiday but am eager to keep making, drawing and exploring.

Fig. 22

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WORK PROPOSAL

Gaida V Macs Sculpture Workshop March 2004

**"everything that we have reminds us what we have lost**
**everything that we have echoes what we desire..."**

she prefers fire Deborah Conway [1]

In this increasingly commodified world I am fascinated by how fractured and fragmentary the 'self' can be; how easy it is to show dfferent facets of ourselves to different people in different contexts. It is easy to sometimes feel as though there is no singular unique whole self which is able to be captured. Life experiences variously mark, scar and inform each of us and it is through making sense of such experiences that we become aware of just influential a role nature and nurture have on our development. As an artist I want to explore how the making process might inform the investigation of 'self' in all of its amazing and contradictory facets.

My initial idea is to make a series of containers which are impractical, not capable of containing, or which threaten to dissolve, decay, expose and allow leakages to occur. I want to investigate scale, form and surface to offer a range of perspectives about the 'self' by transfiguring commonplace items

My particular interest in the domestic environment and household objects(especially culinary ingredients) is very likely to remain and I would expect these items to continue to inform my ongoing investigations. Over the past 2 years my work has involved making vessel and container shapes, wrapping, binding and coating small objects in wax, and using multiples to

[1] Bitch Epic EMI 1993

construct forms.. The new and absurd objects I make out of collected and found objects speak of journeys, confinement and control and growth.

As an artist, my sense of 'self' is inextricably linked with the making process - how this informs me and allows me to process my own experiences. I would research appropriate sociological theories about the passion for collecting and display together with contemporary literary and art theory about autobiography and self-representation. I anticipate that my Honours Research Report will closely follow the progress and refinement of these concerns through my studio practice. I expect that by researching, compiling, documenting and editing visual diaries I will produce a body of commentary together with drawings, maps and other visual paraphenalia which can themselves be collated into a bound studio report.

As I collect things and use discarded and recycled items which have a history I anticipate working with assemblage, construction and casting. Found and collected items will be combined with 'traditional' sculpture materials into forms and objects which inhabit their own space. Drawings will support my work as a way of making ideas sit in space. I would negotiate learning some basketmaking and weaving skills from the Textiles workshop. I expect that anything I anticipate needing will be available through ANU or other national institutions in Canberra.

" Shards of memory fall through my fingers... the past is as much about origin as it is about recollection...we are our own juxtapositions" [2]

Th wider material-based context for my proposal has its genesis in the art of the readymade. In addition the practice of collection and display, cabinets of curiosities and Wunderkammer, is integral to my investigations. "Drawn from a 'hunting ground' that largely encompasses the kitchen, laundry, and the studio in between... (it) emerges from female spaces and happily places

[2] Kimiko Hahn, in Yesterday p.3 as quoted in Lucy Lippard Mixed Blessings p. 139

'women's work' such as sewing and fabric dyeing alongside more traditional sculptural techniques" [3].

Artists of Arte Povera are relevant – in addition Linde Ivimey, Tom Friedman, Mona Hatoum, Tony Cragg, Hossain Valamanesh and Eva Hesse are all informing my work

Intellectual and theoretical ideas which provide context for my work include:

- Key literary texts which I find inspiring would include House as a Mirror of Self by Clare Marcus for its insights into domestic space and its impact on our lives; Susan Stewart's On Longing together with At the Threshold of the Visible. In addition, other texts (such as Susan Pearce's works) on collecting, display and containment will be referenced.

- Jung's psychological approaches – especially those relating to symbols and dreams

I find I am also drawn to certain music, for instance Gorecki's Symphony No. 3 Op. 36 (Symphony of Sorrowful Songs) for its peculiar relevance to the mood of today, its anxieties, sorrows and hopes. Increasingly listening to 'world' music – anything where I can't hear/understand the lyrics when I make Being an avid reader, I also find that literature about the current zeitgeist provides me with ample ideas – ie. Winterson, Houellebecq, Coetzee, McGahan.

My investigation will result in an installation consisting of a series of sculptures together with drawings and other 2D works.

My anticipated work program is as follows:

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[3] Kelly Gellatly, Close to the Bone catalogue of Linde Ivimey's sculpture; Heide , 2003

First Semester

Collect, experiment and test my thesis; I will research themes of 'self' , self-representation and materiality; as I progress I will collate both information and materials, classify and document as I go. This early work will allow me to develop the focus and clarify my objectives and aims.

Second Semester

Refine, progress and finish my making processes as well as concluding my research. The draft studio report will be produced in stages aligned with my progress; I would refine and conclude this in conjunction with final resolution of my sculptural practice.

**Curriculum Vitae**

**Personal Details**

Ms Gaida Macs
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ACT 2608

Born in Perth, WA, in 1956

**Education**

| | | |
|---|---|---|
| 2004 | Candidate for BA Visual Arts(Honours) | ANU School of Art |
| 2003 | Bachelor of Visual Arts(current) | ANU School of Art |
| 1995 | Bachelor of Arts (English Hons) | The Australian National University |
| 1982 | Bachelor of Business( Law and Accounting) | Curtin University |

**Work experience**

Most recently I have been working as the Executive officer for ACUADS, responsible for the administration aspects of the organisation under the oversight of the Chair of the Executive Committee. Prior to this I spent over 25 years working in various capacities for a number of organisations. I have experience in general, project and budget management, staff training and adult education, interpersonal skills training, crisis counselling, legal interpretation and drafting of legislation, client contact and ministerial and parliamentary advising.

**Professional Membership**

Member of NAVA, CMAG, NGA, Megalo, CCAS

**Professional Experience**

Curator of "IN/VISIBLE SUPPORT" – group exhibition held at the ANU School of Art Foyer Gallery from 10-22 August 2004.

**Group Exhibitions**

| | | |
|---|---|---|
| November 2003 | 2003 Megalo Members Exhibition | megalo print studio |
| November 2003 | twilight @ the gods | the gods café<br>anu |
| August-Sept 2003 | H2003<br>Ceremonial vessels<br>for the Drinking of Water | canberra centre<br>ANU School of Art Foyer Gallery |
| October 2002 | *Fruition* | toast |
| August 2002 | CSA Drawing prize(panel selection) | ANU School of Art Foyer Gallery |

**Performance works**

Participant in small group performance for video produced for Mella Jaarsma's "Soup – the Hunter, Healer and Cook" for *Witnessing to Silence* exhibition at CCAS August-September 2003

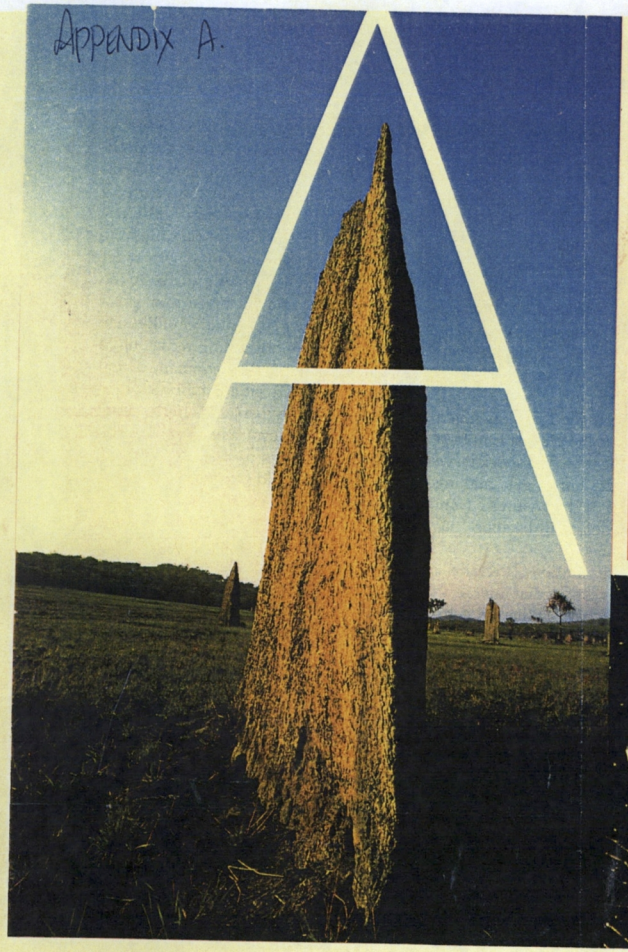
**Referees**

| | |
|---|---|
| Michael le Grand | Head, Sculpture Workshop ANU School of Art |
| Vivienne Binns | Head, Core Studies Workshop ANU School of Art |
| Prof.David Williams | Director, ANU School of Art and Chair ACUADS |

Appendix A.

# IT'S

If a termite's mound can breathe like a lung, does that make it part of the insect's body? **Kathryn Brown** meets the man who wants to redefine life



SCOTT TURNER lives in a old farmhouse in out-of-the-way Tully, New York. Step outside Turner's kitchen door, and you step into a gumdrop-green valley. His backyard is open and roomy, with haphazard apple trees and wild flowers that teeter towards the valley below. The breeze smells like mint, and it sets everything swaying. In the midst of all this outdoor action, Turner stops to choose a surprising subject for a lesson in thermodynamics.

In the elbow of an apple tree, a gauzy brown web holds about 400 little worms. Webworms may look like tan paper clips come to life, but they're smart. Rather than constantly generating their own energy to stay warm, the worms weave a silky bag to do the job for them. By capturing sunlight and blocking the wind, the web creates a climate as steady as Los Angeles. It's a convenient means of energy conversion. But Turner argues that the webworms' web is something far more: it is alive.

In his new book, *The Extended Organism*, Turner suggests that animal structures like webs, nests, hives, burrows and mats are physiological extensions of their animal creators. They take energy and materials from the environment, including sunlight, water and oxygen, and funnel them to the organisms inside. This makes these structures as much a part of a living animal as more conventional organs such as livers, lungs, kidneys and hearts. Although the web is outside the webworm's skin, it's doing the same job as the tissues inside other animals that break down glucose to release energy and keep them warm. "Suddenly," says Turner, "the boundary between the living and non-living seems very arbitrary."

These days, many biologists define life simply in terms of genes—an organism is something with replicating DNA, or at the very least RNA. But over a century ago, when ecologists first began studying the environment, some took a more holistic view, and physiology was central. Turner, who fits squarely into this camp, sees a living thing as a continuous flow of energy and matter—a kind of thermodynamic system. "Until now, this back-and-forth between animals and their structures has, in many circles, been ignored," says Clive Jones of the Institute of Ecosystem Studies in Millbrook, New York.

Turner doesn't dismiss the role of genes. Indeed, his ideas build on the now-famous "extended phenotype" proposed by Oxford University biologist Richard Dawkins 20 years ago. Just as genes direct an animal's colour or shape, Dawkins suggested, they also direct building behaviour. A beaver's carpentry genes help it build just the right dam, for instance, and as a result the beaver finds more food and increases its survival chances. In this way, the beaver dam is really an extension of the beaver's expressed genes, or phenotype.

Pete Oxford, Martin Dohrn/BBC Natural History Unit
Martin Harvey, James Warwick/NHPA

**Extensions: built structures including termite mounds, spiders' webs and birds' nests work for an organism in much the same way that internal organs do**

Although Dawkins gave us the philosophy of the extended phenotype, he had few examples of animal architecture to back it up. Two decades later, Turner is picking up where Dawkins left off. "Talking about genes is fine, but you've got to have the machinery that makes the matter and energy, that carry genes into the future," says Turner. "I want to put the flesh and bones on the extended phenotype." He's off to a flying start—but there could be controversy ahead.

Turner stumbled, quite literally, on the extended organism. A decade ago he was in Mafikeng, South Africa, studying the energy flow between an ostrich embryo and its mother, and when the project ended he took a teaching position. Tall and quiet, Turner has the owlish look and patient ways of a teacher. And he notices things. From his office, he could see the tops of a bunch of termite mounds: dirt chimneys jutting a metre above the patchy grass, like baked-mud monoliths, with termites living far in the ground below.

Southern African termites are known for their elegant mounds—palatial networks of tunnels, galleries, cellars and fungus gardens—which the insects keep warm and well-ventilated by regulating the flow of oxygen and carbon dioxide. How do they maintain such a steady environment? Curious, Turner gave a gift of beer to a local villager, who took a backhoe to the dry dirt surrounding some of the underground mounds, exposing them. Then Turner stuck a syringe filled with a tracer gas inside to see how the gas flowed through the interior.

When the residents of Mafikeng, and later those of Outjo in Namibia, saw Turner on hands and knees inspecting termite mounds, they assumed he was some kind of exterminator, there to tear down the towers of dirt. He became known as the "termite doctor". "They were quite disappointed when they realised I was interested in keeping the termite mounds going, not clearing them away," he grins. Instead, Turner carried out a series of studies that have shown how termite metabolism and wind outside the mound work together to drive gasses in and out of the chambers, in a flow that's remarkably similar to the movement of air in lungs.

He concludes that termite mounds are really an extension of the termites themselves, an integral and active part of their physiology. The same goes for the homes of similar social insects, like bees and ants. Thomas Seeley, a bee researcher from Cornell University, agrees. "A lot of

'Nature is full of energy ready to be tapped, and I see engines everywhere'

biologists see the outer portion of the skin or skeleton as the limit of the effects of genes, and that's pretty clearly not the case," he says. Seeley believes that the honeycomb is an extension of the bee's phenotype because, like termites, bees work together using their accumulated body heat to keep the comb at a constant temperature. "You can think about ecosystems as being massive flow pipes of matter and energy," says Turner, "and start looking for ways that organisms modify the environment to help them live."

Consider the diving bell spider. All spiders must breathe air, but these particular spiders can live underwater because they construct an external "lung", a web that traps a bubble of air below the surface. In fact, many aquatic insects tote a "bubble gill" around. Turner points out that there is some marvellously subtle physics at work. Without the insect attached, a submerged bubble of air will gradually collapse as the gases move out into the water under a combination of hydrostatic pressure and surface tension. But with an insect breathing from the bubble, the partial pressure of oxygen falls below its value in the water. Oxygen then flows into the bubble, delaying its collapse and replenishing the insect's reserves.

But Turner does not see extended organisms as mere oddballs and anomalies. He argues that every animal has two physiologies. While conventional biology recognises the flow of energy inside the body, there is a second external physiology whenever an organism alters its environment to make nature work for it. How energy flows, and how it can be made to do work in the process is, of course, the subject of thermodynamics, which is why Turner frames his description of the extended organism in the language of physics. To explain how an animal's physiology can reach beyond its living cells, he starts by describing classic physiology.

## Work to order

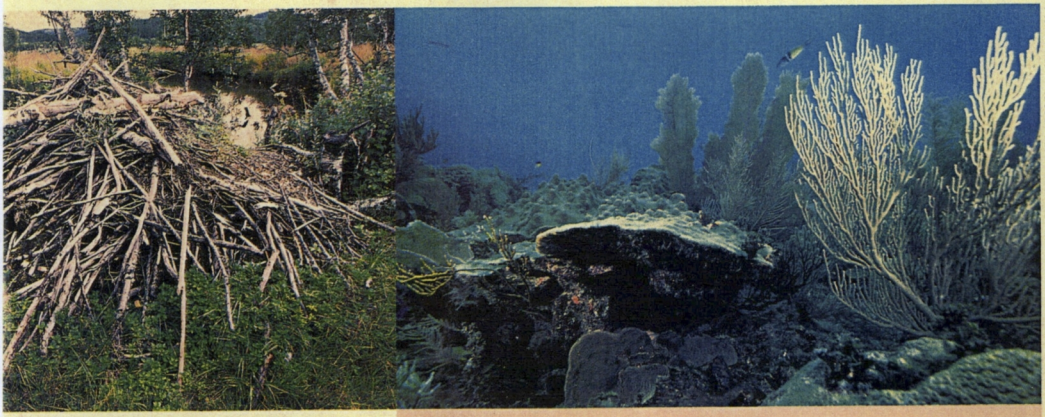
Take a freshwater fish, says Turner. Its internal fluids contain a higher concentration of salts and other small solutes than the surrounding water. As a result, water tends to flow into the fish, through its skin, by osmosis. Expressed according to the second law of thermodynamics, entropy increases as an ordered system (the fish and its surrounding water) becomes disordered. To maintain order, the fish's kidneys and gills are constantly at work, flushing out excess water while storing up valuable solutes. "Physiology is essentially how animals use energy to do order-producing work," notes Turner.

Now he whips out a murkier example. Corals and their tiny colourful house guests, zooxanthellae, build a tapestry of undersea reefs from the mineral calcium carbonate. But a crucial part of the physiological process occurs outside the animal. Corals expend energy moving hydrogen ions into their cells and calcium ions out. Inside, the hydrogen ions allow the zooxanthellae to photosynthesise, producing glucose to power the process. Outside, on the surface of the reef, the removal of hydrogen ions forces hydrogen carbonate to form carbonate, which then reacts with the calcium to give calcium carbonate. The system doing the work is a combination of coral, zooxanthellae and the reef itself.

Turner finds extended organisms everywhere he looks, from microbes to earthworms and from crickets to mosses. "Nature is full of energy ready to be tapped, and I see engines everywhere," he says. But not everyone is convinced. "Turner has identified a very interesting problem," says Michael Hansell, an ecologist at the University of Glasgow, "but I think he's heading off in the wrong direction." Hansell takes the more conventional view that mounds, hives, nests and other ordinary animal dwellings are merely architecture—useful artefacts that often get left behind by their creators or tapped by other animals in the neighbourhood. So how can such structures be extensions of the creatures that make them, he asks?

Turner responds that an extended physiology may indeed be temporary, as an animal's give-and-take with some sliver of the environment changes over time. The desert lizard eventually leaves its burrow, for instance, and when it does, the burrow becomes simply a physical anomaly in the environment. But when the lizard creates the burrow, it does so to maintain body temperature and fluid levels. When it uses the burrow for these purposes, it is a bodily extension, of sorts. Seeley agrees. "Yes, structures have secondary users. But the design or properties of a built structure are what they are to serve the fitness or physiology of the builder."

Taken to its logical conclusion, does that make our homes and cars extensions of our physiology? Are these structures, in a sense, alive? To distinguish a BMW from a burrow, Turner falls back on tight links to physiology, energy transactions of a primal sort. "The BMW, in moving us from place to place, is doing work for us that would ordinarily be done with internal physiology," concedes Turner. But, he adds, the structures that we build are one step removed from those of other animals because we power them with fossil fuels rather than the Sun, wind, gravity,



B. Jones, M. Shimlock/NHPA Niall Benvie, Richard Kirby/BBC Natural History Unit

osmosis and other "natural" energy sources.

Here Turner's line of reasoning may be sticky, but his ideas really become controversial at the grand scale. If a termite colony can regulate its environment, creating a kind of natural balance, he asks, why can't whole ecosystems? For Turner, the extended phenotype naturally marches up the scale of nature, to include Earth itself. He is an advocate of the Gaia hypothesis—the idea that Earth acts like a superorganism, with all its biological and physical systems cooperating to keep it healthy (*New Scientist*, 30 May 1998, p 28). Turner acknowledges that many scientists still see Gaia as "a big crackpot idea". Even so, he says, there are many physiology lessons to be found in work by Gaia theorists.

Most of his colleagues, however, believe that this is where he goes astray. "If you stay within the realm of single organisms, where Turner starts, you can clearly measure the energy and material going between the organism and its environment," says Jones. "But when you talk globally, it becomes very difficult to sum up the specific energy transactions going on." Steven Vogel from Duke University adds: "Turner's insights are very useful. But where do they take us, in a global sense? That's hard to say."

If Turner can't quite build the big picture yet, he's content to continue finding extended organisms one at a time. "What I'm trying to do is bring a perspective to biology that we've lost sight of in the race to sequence genes and see life at the molecular level," he says. While others look inward for answers, Turner's gaze is decidedly turned out. □

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## EARTHLY INHERITANCE

LIVING things evolve. And so do the structures that animals build. In his book The Extended Phenotype, Richard Dawkins pointed out that a construct such as the beaver's dam is heritable in the sense that there are genes for building behaviour, and natural selection favours individuals that build the best dams. But some biologists go much further than this. They argue that the way living things alter their environment—their so-called niche construction—plays a central role in evolution.

For a start, by building a home an animal influences the selection of a great number of genes that might be beneficial for life in that constructed environment, not just those responsible for building behaviour. Many creatures that live in burrows or nests, for example, have evolved behaviours to defend and maintain their property. And, after countless generations of web building, some spiders have evolved the ability to create dummy spiders in their webs to divert the attention of birds that might prey on them.

At a deeper level, living things don't just adapt to their environmental niche, they also create it. "There are two routes to adaptation, since organisms can adapt to become suited to their environments or modify their environments to suit themselves," says Kevin Laland from the University of Cambridge. What's more, organisms can modify the selection pressures acting on their distant descendants via niche construction. Worms, for example, have dramatically changed the structure and chemistry of soil by their burrowing. Over time, they will also have adapted to this worm-made environment, perhaps through changes in their skin and mucus secretions.

Laland even argues that human culture is just a special form of niche construction. In a paper published earlier this year (Behavioral and Brain Sciences, vol 23, p 131), he and colleagues John Odling-Smee from the University of Oxford and Marcus Feldman from Stanford University in California suggest that by seeing culture in this way we can understand how it leads to adaptation at the level of the genes. Cultural traits such as the use of tools, fire and language have modified the selection pressures we face and led to genetic change. "One reason why our species thrives is that we are such potent niche constructors we can render even the most hostile environments benign," says Laland. "No organism, least of all humans, adapts to a pre-existing niche." Kate Douglas